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				Application Number	09/858.289	
INFORMATION DISCLOSURE				Filing Date	May 15, 2001	
STATEMENT BY APPLICANT				First Named Inventor	Nicholas Schork, et al.	
STATEMENT BY AFFLICANT				Art Unit	Unknown	
(use as many sheets as necessary)			cessary)	Examiner Name	Unassigned	
Sheet	1	of	3	Attorney Docket Number	55.US4.DIV	

	U.S. PATENT DOCUMENTS						
Examiner Initials		Document Number Number - Kind Code <sup>2</sup> (if known	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
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	FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No. 1	Foreign Patent Document  Country Code 3 - Number 4 - Kind Code 5 (# known)	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>	
coc	В	WO 99/32644 - A2	07/01/1999	Genset			
	С	WO 99/04038 - A2	01/28/1999	Genset			
	D	WO 98/20165 - A2	05/14/1998	Whitehead Institute			
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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Nicholas Schork, et al.					
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	09/858.289 Mav 15. 2001 Nicholas Schork. 6 Unlassigned				

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
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co.	Е	D. WANG, ET AL.; "Toward a third generation genetic map of the human genome based on bi-allelic polymorphisms"; Abstract; Whitehead Institute/MIT Center for Genome Research, Cambridge, MA 02139 and Affymetrix, Inc., Santa Clara, CA; XP 002050641 (1996)	
	F	N.J. SCHORK, ET AL.; "Linkage disequilibrium mapping for quantitative traits within case/control settings"; Abstract; Dept. of Epidemiology and Biostatistics, Case Western Reserve University; Harvard University; The Jackson Laboratory; Genset; CEPH; XP-002089399 (1953)	
	G	EUGENE I. DRIGALENKO, ET AL.; "False Discoveries in Genome Scanning"; Genetic Epidemiology 14:779-784 (1997); 1997 Wiley-Liss, Inc.	
	Н	LAURENT EXCOFFIER, ET AL.; "Maximum-Likelihood Estimation of Molecular Haplotype Frequencies in a Diploid Population"; Mol. Biol. Evol. 12(5):921-927, 1995; 1995 The University of Chicago; 0737-4038/95/1205-0021	
	1	LAURENT EXCOFFIER, ET AL.; "Incorporating Genotypes of Relatives into a Test Linkage Disequilibrium"; Am. J. Hum. Genet. 62:171-180, 1998; The American Society of Human Genetics; 0002-9297/98/6201-0025	
	J	A. P. DEMPSTER, ET AL.; "Maximum Likelihood from Incomplete Data via the EM Algorithm"; Harvard University and Educational Testing Service; Roayl Statistical Society; December 8th, 1976; pgs. 1-38	
1	к	M. E. HAWLEY, ET AL.; "HAPLO: A Program Using the EM Algorithm to Estimate the Frequencies of Multi-site Haplotypes"; Dept. of Genetics, Yale University School of Medicine, The Journal of Heridity 1995:86(5)	
	L	T. SCHWEDER, ET Al; "Plots of P-values to evaluate many tests simultaneously"; Biometrika (1982), 69, 3, pp. 493-502; Great Britain	
	м	D. C. THOMAS, ET AL.; "The Problem of Multiple Inference in Studies Designed to Generate Hypotheses"; American Journal of Epidemiology; 1985 The Johns Hopkins University School of Hygiene and Publich Health; Vol 122, No. 6, pgs. 1080-1094	
	N	EDWARD I. GINNS, ET AL.; "A genome-wide search for chromosomal loci linked to mental health wellness in relatives at high risk for bipolar affective disorder among the Old Order Amish"; Proc. Natl. Acad. Sci. USA; Vol. 95, pp. 15531-15536, December 1998, Genetics	
	0	ESTER M. M. VAN LIESHOUT, ET AL.; "Polymorphic Expression of the Glutathione S-Transferase P1 Gene and Its Susceptibility to Barrett's Esophagus and Esophageal Carcinoma"; Cancer Research 59, 586-589, February 1, 1999, pgs. 586-589	

Examiner Signature COOS	sidered 8(21/6)
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Application Number	09/858.289					
Filing Date	May 15. 2001					
First Named Inventor	N. Schork. et al.					
Group Art Unit	Unknown	163	L			
Examiner Name	Unassigned					
Attorney Docket Number	55.US4.DIV		_			

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Т2
coc	Р	GRIFFITHS, ET AL.; "An Introduction to Genetic Analysis"; 1993, U.S. XP002136574; "The Chi-Squared Test", pg. 132-135; W. H. Freeman and Company, New York	
	Q	LANDER, ET AL.; "MAPMAKER: An Interactive Computer Package of Constructing Primary Genetic Linkage Maps of Experimental and Natural Populations"; Genomics 1, 174-181 (1987); 0888-7543/87; Academic Press, Inc.	
	R	LANDER, ET AL.; "Mapping Mendelian Factors Underlysing Quantitative Traits Using RFLP Linkage Maps"; Genetics 121: 185-199, January 1989; Genetics Society of America	
	s	M. XIONG, ET AL.; "Biallelic Markers in Genetics Studies of Human Diseases: Their Power, Accuracy, and Density in Population-based Linkage Analyses"; American Journal of Human Genetics, U.S., New York, NY, vol. 61, no. 4, Suppl, 1997, page 1759; XP002119235; ISSN: 0002-9297	
	T	MORELL, ET AL.; "Analysis of short tandem repeat (STR) allele frequency distributions in a Balinese population"; Hum. Mol. Gen.; vol. 4, No. 1, 1995, pgs. 85-91; XP002136573	
	U	JONATHAN CORNELIUS; "Heritabilities and additive genetic coefficients of variation in forest trees"; Canadian Journal of Forest Research, 1994, Vol. 24, pg. 372-379; XP002136575	
	V	LEONID KRUGLYAK; "The use of a genetic map of biallelic markers in linkage studies"; Nature Genetics, Vol. 17, September 1997; pgs. 21-24	
	w	JOHN G. K. WILLIAMS, ET AL.; "DNA polymorphisms amplified by arbitrary primers are useful as genetic markers"; Nucleic Acids Research, Vol. 18, No. 22; pgs. 6531-6535 (1990)	
			<u> </u>

Date Examiner Considered Signature

<sup>&</sup>lt;sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



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